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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,392

10/20/2003

Robert E. Smith III

221-0074US

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29855

7590

02/23/2006

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EXAMINER

PICKARD, ALISON K

ART UNIT

PAPER NUMBER

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GROUP 3600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/689,392
Filing Date: October 20, 2003
Appellant(s): SMITH, ROBERT E.

Christopher Keirs
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10-26-05 appealing from the Office action mailed 7-26-05 (and advisory action of 9-28-05).

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claims appears on pages 9-11 of the Appendix to the appellant's brief. The minor errors are as follows: claim 8 should have the word "pressure" after "fluid." Also, claim 5 is objected to as having allowable subject matter and is not a claim involved in the appeal. It does not need to be included in the appendix.

(8) Evidence Relied Upon

5,893,389	Cunningham	4-1999
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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 6-8, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (5,015,016) in view of Press (3,142,498).

Smith discloses a seal retainer 22 and female hydraulic coupling member 21. The retainer comprises a first metal seal 15 that will form a pressure-energized seal with a probe 13 and a second metal seal 55 that will create a pressure-energized seal between the retainer and member 21. The first seal is a lip seal. The second seal is a concave seal. Smith does not disclose that the first and second seals are integral/machined with the body of the retainer. Press teaches a pressure-energized seal and retainer (13 or 35). Press teaches that making the seal integral with the body of the retainer (Fig. 3) is an art equivalent to providing them separately (Fig. 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the retainer of Smith by making the first and second seals integral with the retainer as such is an art equivalent construction as taught by Press. (Note: Cunningham '389 provides additional support that it is known to make a seal integral with a body.)

Regarding claims 4 and 16, Smith does not disclose that the lip is displaced about 0.001 inches. It is not considered inventive to discover the optimum or workable ranges by routine experimentation absent the showing of some criticality of the claimed ranges. See *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to form the seal such that it will be displaced about 0.001 inches.

(10) Response to Argument

Appellant argues that Smith does not disclose a seal retainer having integral metal seals as required by claim 1. The examiner disagrees. Smith discloses a seal retainer 22 comprising a first metal seal 15 and a second metal seal 55. The seals 15 and 55 can be considered “integral” in that they are provided with the retainer in the hydraulic coupling member as a unit that functions together. Further, seal 15 can be considered “integral” in that it is retained on the retainer 22 via a threaded element 29 (see column 6, lines 52-54). However, neither seal is integrally machined from the body of the retainer. Press teaches a coupling arrangement with a pressure-energized lip seal and retainer 13 or 35. As seen in Figures 3 and 5, Press teaches that it is known to provide a seal and retainer as a one-piece unit or as separate elements. In other words, Press teaches that a one-piece construction instead of several parts is an art equivalent, and thus an obvious modification. Cunningham further evidences this teaching.

Appellant argues there is no suggestion to combine the references because the references are unrelated. The examiner disagrees. First, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Second, it has been held that a prior art reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular

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problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Smith and Press relate to fluid couplings having a retainer and a pressure-energized metal seal. Both disclose pressure-energized seals having lips that are affected by pressure. And, both disclose that the seals are adjacent a “retaining” structure. Press further teaches art equivalent manufacturing of a pressure-energized seal with a retaining structure, i.e. one-piece or separate elements. Thus, one of ordinary skill in the art would have the knowledge that the arrangements (one-piece vs. multi-piece) are equivalents when certain manufacturing considerations, such as price or quality, are or aren’t of concern.

It is also submitted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Thus, Appellant’s argument that Press does not disclose a retainer is unpersuasive. Press does disclose a retainer 35 or 13 in that the element “retains” the seal within the coupling. Regardless, Smith already discloses a retainer as required by the claims. Press is used for its art equivalent teaching.

Regarding the comments made about claim 2 and claim 7, as set forth in the rejection, Smith discloses “a metal lip seal” 15 and “a metal concave seal” 55 as required by both these claims. There are no limitations in either claim requiring either seal to “contract upon pressurization” as argued by Appellant.

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Appellant argues that element 29 of Smith is not an inner seal carrier (page 4 of the Brief). However, claim 1 does not require an “inner seal carrier.” Claim 5 requires an inner seal carrier, but Claim 5 is objected to as having allowable subject matter and is not an appealed claim.

Finally, in response to Appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Not only has it been held that one-piece construction instead of several parts is obvious (see *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)), but Press (and Cunningham) teaches such construction is a known art equivalent in a fluid coupling member having a seal and retainer.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Alison Pickard



Conferees:

Darnell Jayne 

Vishal Patel , VP

Tricia Engle 